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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/828,718

04/21/2004

David A. Hill

030728 (BLL-0181)

4760

36192 7590 05/08/2009

AT&T Legal Department - CC

Attn: Patent Docketing

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EXAMINER

PHAM, MICHAEL

ART UNIT

PAPER NUMBER

2167

MAIL DATE

DELIVERY MODE

05/08/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/828,718	<b>Applicant(s)</b> HILL, DAVID A.	
	<b>Examiner</b> MICHAEL PHAM	<b>Art Unit</b> 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15, 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Status***

1. Claims 1-5, 7-15, and 17-20 are pending.
2. Claims 1-5, 7-15, and 17-20 have been examined.

### ***Claim Objections***

3. Prior claim objections are respectfully withdrawn.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 10, and 11 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 10, and 11 recite "querying an external source of information for data missing from the service request, wherein the external source of information did not generate the service request". The recitation does not appear in 0019, and further wherein the external source of information did not generate the service request is not supported in the recited paragraph.

***Claim Rejections - 35 USC § 101***

6. Regarding claim 10 this claim recites a 'computer-readable storage medium.' In the absence of any modifying disclosure of this limitation in the specification, the examiner interprets the term 'storage medium' as excluding printed paper, transmission media, signals, or any form of energy, such that the claim clearly falls within a statutory class of invention as required under the terms of 35 U.S.C. 101.

7. Regarding claim 11 this claim recites a 'computer processor.' In the absence of any modifying disclosure of this limitation in the specification, the examiner interprets the term 'computer processor' as limited to at least containing hardware embodiments, such that the claim clearly falls within a statutory class of invention as required under the terms of 35 U.S.C. 101.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**9. Claims 1- 2, 5, 7, 10-12, 15, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6208345 by Sheard et. al. (hereafter Sheard) further in view of U.S. Patent Application Publication 20030046289 by Balasubramanian et. al. (hereafter Balasubramanian).**

**Claim 1 :**

Sheard discloses the following claimed limitations:

“converting data in a service request into an open data format resulting in a converted service request;”[figure 1, col. 12 lines 8-10, data streams produced by information provider 1 is control or request information which is further processed by the data exchange infrastructure. Col. 8 lines 18-21, the adapter 34a reformulates the informational content 'A' into a common or generic form which is subsequently operated on by the data exchange infrastructure 32. col. 8 lines 25-32, Assuming that Application 2 requires selected informational content 'A' produced by application 1, the data exchange infrastructure 32 facilitates the transport of the content ‘A’ information to adapter 34b associated with application 2. The adaptor 34b reformulates the informational content ‘A’ having a common representation to a format ‘B’ representation which is compatible with application 2. Accordingly, converting data (format A) in a service request (request) into an open data format (common format) resulting in a converted service (format B).]

“validating the converted service request utilizing user-defined business logic, the validating including:”[col. 12 lines 30-39, an application running within the system environment operated by information provider 2 may require data that is derived through computation or manipulation from data streams B1 and C1 produced by corresponding applications running

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within the system environment operated by information provider 1. The data exchange operates on the data streams B1 and C1 in the manner dictated by user-specified business logic stored in the business logic module. Col. 13 lines 15-20, business logic provides for enhanced scalability, expandability, and flexibility to meet current and future information exchange requirements. Accordingly, disclosing validating (meet current and future information exchange requirements) the converted service request (operates on the data streams B1 and C1) utilizing user-defined business logic (user-specified business logic).]

“performing accuracy checks of data fields and data within the converted service request; and”[col. 14 lines 49-52, if the data is considered corrupt, an error in the data packet received from the external source is verified, and, in response, is removed or deleted for purposes of further processing. Accordingly, performing accuracy checks (verified) of data fields (data packet) and data (data) within the converted service request (request).]

“performing consistency checks of data and data fields within the converted service request;”[col. 14 lines 60-65, if the transaction is not successful a rollback of the transaction is then initiated. If the transaction is successful, the data packet from the external data source is then removed or deleted. The above-described process is then repeated for subsequent data packets received from the external source. Accordingly, performing consistency checks (if transaction successful) of data (data) and data fields (data packet) within the converted service request (request).]

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“resolving any errors and inconsistencies detected from the validating resulting in a validated service request;”[ Figure 12, Accordingly, resolving any errors (338, error) and inconsistencies (350, system failure) detected from the validating (336 and 350) resulting in a validated service request (figure 12)]

“generating a service order using the validated service request, the service order formatted to comply with formatting utilized by a service order control application; and”[ col. 14 lines 32-34, after the business rules have been applied, requests to one or more destination OSS applications are then routed to a corresponding send queue 242, 244, 246 for delivery. Accordingly, generating a service order (delivery) using the validated service request (figure 12), the service order formatted to comply with formatting utilized by a service order control application (col. 14 lines 38-43, requested information represented in common object form to a format structure specified by the particular OSS. The converted data is then transmitted from the application interface of the adaptor to its corresponding OSS)]

“transmitting the service order to the service order control application;”[col. 14 lines 38-43, the converted data is then transmitted from the application interface of the adaptor to its corresponding OSS. Accordingly, transmitting the service order to the service order control application (transmitted...to corresponding OSS)]

“wherein resolving any errors and inconsistencies includes:

converting the converted service request back to its original data format; and”[col. 8 lines 30-32, the adaptor 34b reformulates the informational content 'A' having a common

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representation to a format 'B' representation which is compatible with application 2. Figure 12 element 350 and 352. Accordingly, wherein resolving any errors and inconsistencies includes converting the converted service request back to its original data format (rollback)]

“transmitting the service request in its original data format back to a corresponding service request source.”[ col. 8 lines 30-32, the adaptor 34b reformulates the informational content 'A' having a common representation to a format 'B' representation which is compatible with application 2. Figure 12, data from external source. Accordingly, transmitting the service request in its original data format (Format B) back to a corresponding service request source (external source)]

Sheard does not explicitly disclose “querying an external source of information for data missing from the service request, wherein the external source of information did not generate the service request”

On the other hand, Balasubramanian disclose on 0097 lines 6-9, if the leaf node mediated agent is missing information to complete the request to its data source, it will open a dialog to it parent node, informing the parent node of the new information the data source requires.

Accordingly, disclosing “querying” (open dialog) “an external source of information” (parent node) “for data missing from the service request” (missing information to complete the request to it's data source)”, wherein the external source of information did not generate the



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service request” (leaf node mediated agent is missing information to complete the request to its data source, it will open a dialog)

Both Sheard and Balasubramanian are within the same field of endeavor as both are directed to integration systems. They are therefore analogous. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Balasubramanian’s disclosure above to the disclosure of Sheard for the purpose of determining missing information. In doing so, improves upon the disclosure by allowing for another functional inconsistency resolution method.

**Claim 2 :**

The combination of Sheard and Balasubramanian disclose in Sheard “modifying the user-defined business logic to accommodate at least one of:”

“a new or modified service offered;”

“a new or modified product offered; and”

“a new or modified business requirement” [col. 13 lines 17-20, business logic provides for enhanced scalability, expandability, and flexibility to meet current and future information exchange requirements].

**Claim 5 :**

The combination of Sheard and Balasubramanian disclose in Sheard discloses “wherein the resolving errors and inconsistencies includes performing at least one of: flagging the converted

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service request for correction; and” “notifying the corresponding service request source of corrective action to be taken.” [figure 12 element 336 and 350]

**Claim 7 :**

The combination of Sheard and Balasubramanian disclose in Sheard “wherein the external source of

information includes at least one of:

“a central office service resource storing available service offerings,” [col. 9 line 9, telecommunications services, information provider 1 and 2 ]

“a customer facilities resource operable for validating customer facilities, the customer facilities resource including at least one of:

a loop maintenance operations system;”

“a trunk inventory records keeping system; and”

“a loop facilities assignment and control system;”

“an address guide operable for performing address validation, the address guide storing street address information;”

“a telephone number resource operable for storing telephone numbers that are available for reservation and assignment to customers; and”

“a customer service records resource operable for obtaining customer service record information.”

**Claim 10 :**

Sheard discloses the following claimed limitations:

“converting data in a service request into an open data format resulting in a converted service request;” [figure 1, col. 12 lines 8-10, data streams produced by information provider 1 is control or request information which is further processed by the data exchange infrastructure. Col. 8 lines 18-21, the adapter 34a reformulates the informational content 'A' into a common or generic form which is subsequently operated on by the data exchange infrastructure 32. col. 8 lines 25-32, Assuming that Application 2 requires selected informational content 'A' produced by application 1, the data exchange infrastructure 32 facilitates the transport of the content 'A' information to adapter 34b associated with application 2. The adaptor 34b reformulates the informational content 'A' having a common representation to a format 'B' representation which is compatible with application 2. Accordingly, converting data (format A) in a service request (request) into an open data format (common format) resulting in a converted service request (format B).]

“validating the converted service request utilizing user-defined business logic, the validating including:” [col. 12 lines 30-39, an application running within the system environment operated by information provider 2 may require data that is derived through computation or manipulation from data streams B1 and C1 produced by corresponding applications running within the system environment operated by information provider 1. The data exchange operates on the data streams B1 and C1 in the manner dictated by user-specified business logic stored in the business logic module. Col. 13 lines 15-20, business logic provides for enhanced scalability, expandability, and flexibility to meet current and future information exchange requirements. Accordingly, disclosing validating (meet current and future information exchange requirements)

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the converted service request (operates on the data streams B1 and C1) utilizing user-defined business logic (user-specified business logic).]

“performing accuracy checks of data fields and data within the converted service request; and” [col. 14 lines 49-52, if the data is considered corrupt, an error in the data packet received from the external source is verified, and, in response, is removed or deleted for purposes of further processing. Accordingly, performing accuracy checks (verified) of data fields (data packet) and data (data) within the converted service request (request).]

“performing consistency checks of data and data fields within the converted service request;” [col. 14 lines 60-65, if the transaction is not successful a rollback of the transaction is then initiated. If the transaction is successful, the data packet from the external data source is then removed or deleted. The above-described process is then repeated for subsequent data packets received from the external source. Accordingly, performing consistency checks (if transaction successful) of data (data) and data fields (data packet) within the converted service request (request).]

“resolving may errors and inconsistencies detected from the validating resulting in a validated service request;” [ Figure 12, Accordingly, resolving any errors (338, error) and inconsistencies (350, system failure) detected from the validating (336 and 350) resulting in a validated service request (figure 12)]

“generating a service order using the validated service request, the service order formatted to comply with formatting utilized by a service order control application; and” [ col. 14 lines 32-34, after the business rules have been applied, requests to one or more destination OSS applications are then routed to a corresponding send queue 242, 244, 246 for delivery.

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Accordingly, generating a service order (delivery) using the validated service request (figure 12), the service order formatted to comply with formatting utilized by a service order control application (col. 14 lines 38-43, requested information represented in common object form to a format structure specified by the particular OSS. The converted data is then transmitted from the application interface of the adaptor to its corresponding OSS)]

“transmitting the service order to the service order control application;” [col. 14 lines 38-43, the converted data is then transmitted from the application interface of the adaptor to its corresponding OSS. Accordingly, transmitting the service order to the service order control application (transmitted...to corresponding OSS)]

“wherein resolving any errors and inconsistencies includes: converting the converted service request back to its original data format; and” [col. 8 lines 30-32, the adaptor 34b reformulates the informational content 'A' having a common representation to a format 'B' representation which is compatible with application 2. Figure 12 element 350 and 352.

Accordingly, wherein resolving any errors and inconsistencies includes converting the converted service request back to its original data format (rollback)]

“transmitting the service request in its original data format back to a corresponding service request source.” [ col. 8 lines 30-32, the adaptor 34b reformulates the informational content 'A' having a common representation to a format 'B' representation which is compatible with application 2. Figure 12, data from external source. Accordingly, transmitting the service request in its original data format (Format B) back to a corresponding service request source (external source)]

Sheard does not explicitly disclose “querying an external source of information for data missing

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from the service request, wherein the external source of information did not generate the service request”

Sheard does not explicitly disclose “querying an external source of information for data missing from the service request, wherein the external source of information did not generate the service request”

On the other hand, Balasubramanian disclose on 0097 lines 6-9, if the leaf node mediated agent is missing information to complete the request to its data source, it will open a dialog to its parent node, informing the parent node of the new information the data source requires.

Accordingly, disclosing “querying” (open dialog) “an external source of information” (parent node) “for data missing from the service request” (missing information to complete the request to its data source)”, wherein the external source of information did not generate the service request” (leaf node mediated agent is missing information to complete the request to its data source, it will open a dialog)

Both Sheard and Balasubramanian are within the same field of endeavor as both are directed to integration systems. They are therefore analogous. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Balasubramanian’s disclosure above to the disclosure of Sheard for the purpose of determining missing information. In doing so, improves upon the disclosure by allowing for another functional inconsistency resolution method.

**Claim 11 :**

Sheard discloses the following claimed limitations:

“a server executing a service order control application;”[figure 1, 3, 7]

“a data repository in communication with the server;”[figure 3 element 64]

“a service order generator executing on the server, the service order generator including:

    a service request normalizer;”[figure 3, adapters]

    “a roles engine comprising:

        a field validation module; and”[figure 7 element 172]

        “a custom service validation module; and”[figure 7 element 136]

    “a service order writer;”[figure 7 element 138]

    “a link to at least one service request source;”[figure 1 140 and 152]

“wherein the service order generator performs:

converting data in a service request received from the at least one service order source into an open data format resulting in a converted service request;” [figure 1, col. 12 lines 8-10, data streams produced by information provider 1 is control or request information which is further processed by the data exchange infrastructure. Col. 8 lines 18-21, the adapter 34a reformulates the informational content 'A' into a common or generic form which is subsequently operated on by the data exchange infrastructure 32. col. 8 lines 25-32, Assuming that Application 2 requires selected informational content 'A' produced by application 1, the data exchange infrastructure 32 facilitates the transport of the content 'A' information to adapter 34b associated with application

2. The adaptor 34b reformulates the informational content 'A' having a common representation to a format 'B' representation which is compatible with application 2. Accordingly, wherein the service order generator (figure 1, 3, 7) performs: converting data (format A) in a service request (request) into an open data format (common format) resulting in a converted service request (format B).]

“validating the converted service request utilizing user-defined business logic, the validating including:” [col. 12 lines 30-39, an application running within the system environment operated by information provider 2 may require data that is derived through computation or manipulation from data streams B1 and C1 produced by corresponding applications running within the system environment operated by information provider 1. The data exchange operates on the data streams B1 and C1 in the manner dictated by user-specified business logic stored in the business logic module. Col. 13 lines 15-20, business logic provides for enhanced scalability, expandability, and flexibility to meet current and future information exchange requirements. Accordingly, disclosing validating (meet current and future information exchange requirements) the converted service request (operates on the data streams B1 and C1) utilizing user-defined business logic (user-specified business logic).]

“performing accuracy checks of data fields and data within the converted service request; and”

[col. 14 lines 49-52, if the data is considered corrupt, an error in the data packet received from the external source is verified, and, in response, is removed or deleted for purposes of further processing. Accordingly, performing accuracy checks (verified) of data fields (data packet) and data (data) within the converted service request (request).]



“performing consistency checks of data and data fields within the converted service request;” [col. 14 lines 60-65, if the transaction is not successful a rollback of the transaction is then initiated. If the transaction is successful, the data packet from the external data source is then removed or deleted. The above-described process is then repeated for subsequent data packets received from the external source. Accordingly, performing consistency checks (if transaction successful) of data (data) and data fields (data packet) within the converted service request (request).]

“resolving any errors and inconsistencies detected from the validating resulting in a validated service request;” [ Figure 12, Accordingly, resolving any errors (338, error) and inconsistencies (350, system failure) detected from the validating (336 and 350) resulting in a validated service request (figure 12)]

“generating a service order using the validated service request, the service order formatted to comply with formatting utilized by a service order control application; and” [ col. 14 lines 32-34, after the business rules have been applied, requests to one or more destination OSS applications are then routed to a corresponding send queue 242, 244, 246 for delivery. Accordingly, generating a service order (delivery) using the validated service request (figure 12), the service order formatted to comply with formatting utilized by a service order control application (col. 14 lines 38-43, requested information represented in common object form to a format structure specified by the particular OSS. The converted data is then transmitted from the application interface of the adaptor to its corresponding OSS)]

“transmitting the service order to the service order control application;” [col. 14 lines 38-43, the converted data is then transmitted from the application interface of the adaptor to its

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corresponding OSS. Accordingly, transmitting the service order to the service order control application (transmitted...to corresponding OSS)]

“wherein resolving any errors and inconsistencies includes: converting the converted service request back to its original data format; and” [col. 8 lines 30-32, the adaptor 34b reformulates the informational content 'A' having a common representation to a format 'B' representation which is compatible with application 2. Figure 12 element 350 and 352.

Accordingly, wherein resolving any errors and inconsistencies includes converting the converted service request back to its original data format (rollback)]

“transmitting the service request in its original data format back to a corresponding service request source.” [ col. 8 lines 30-32, the adaptor 34b reformulates the informational content 'A' having a common representation to a format 'B' representation which is compatible with application 2. Figure 12, data from external source. Accordingly, transmitting the service request in its original data format (Format B) back to a corresponding service request source (external source)]

Sheard does not explicitly disclose “querying an external source of information for data missing from the service request, wherein the external source of information did not generate the service request”

On the other hand, Balasubramanian disclose on 0097 lines 6-9, if the leaf node mediated agent is missing information to complete the request to its data source, it will open a dialog to it parent node, informing the parent node of the new information the data source requires.

Accordingly, disclosing “querying” (open dialog) “an external source of information” (parent node) “for data missing from the service request” (missing information to complete the request to its data source)”, wherein the external source of information did not generate the service request” (leaf node mediated agent is missing information to complete the request to its data source, it will open a dialog)

Both Sheard and Balasubramanian are within the same field of endeavor as both are directed to integration systems. They are therefore analogous. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Balasubramanian’s disclosure above to the disclosure of Sheard for the purpose of determining missing information. In doing so, improves upon the disclosure by allowing for another functional inconsistency resolution method.

**Claim 12 :**

The combination of Sheard and Balasubramanian disclose in Sheard “wherein the user-defined business logic is modified to accommodate at least one of:”

“a new or modified service offered;”

“a new or modified product offered; and”

“a new or modified business requirement” [col. 13 lines 17-20, business logic provides for enhanced scalability, expandability, and flexibility to meet current and future information exchange requirements].

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**Claim 15 :**

The combination of Sheard and Balasubramanian disclose in Sheard “wherein the resolving errors and

inconsistencies includes performing at least one of:

flagging the converted service request for correction; and”

“notifying the corresponding service request source of corrective action to be taken.” [figure 12 element 336 and 350]

**Claim 17 :**

The combination of Sheard and Balasubramanian disclose in Sheard “wherein the external source of

information includes at least one of:

“a central office service resource storing available service offerings,” [col. 9 line 9, telecommunications services, information provider 1 and 2 ]

“a customer facilities resource operable for validating customer facilities, the customer facilities resource including at least one of:

a loop maintenance operations system;”

“a trunk inventory records keeping system; and”

“a loop facilities assignment and control system;”

“an address guide operable for performing address validation, the address guide storing street address information;”

“a telephone number resource operable for storing telephone numbers that are available for reservation and assignment to customers; and”

“a customer service records resource operable for obtaining customer service record information.”

**Claim 20 :**

The combination of Sheard and Balasubramanian disclose in Sheard “wherein the service requests are stored in a queue.” [See figure 8]

**10. Claims 3-4, 8, 13-14, and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6208345 by Sheard et. al. (hereafter Sheard) and U.S. Patent Application Publication 20030046289 by Balasubramanian et. al. (hereafter Balasubramanian) further in view of U.S. Patent Application Publication 2003/0061062 by Timothy J. Tucker (hereafter Tucker).**

**Claim 3 :**

The combination of Sheard and Balasubramanian disclose in Balasubramanian

“checking for missing data in the data fields”[0097, missing information]

“checking for incomplete data in the data fields”[0097, missing information]

Sheard and Balasubramanian do not explicitly disclose

“checking for data format errors”

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On the other hand, Tucker more explicitly discloses

“checking for data format errors.” [0044 and 0045, data may be checked for completeness]

Sheard, Balasubramanian, and Tucker disclose systems that process transactions between systems. They are therefore within the same field of endeavor as applicant’s invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Tucker to the disclosure above to the combination of Sheard and BalaSubramanian for the purpose of checking for completeness, and verifying that the required fields are present, 0045.

**Claim 4 :**

Sheard and Balasubramanian do not explicitly disclose “checking a first data field within the converted service request against subsequent data fields within the converted service request, wherein the first data field holds data corresponding to data held in at least one of the subsequent data fields.”

On the other hand, Tucker discloses 0045, discloses checks for completeness may include verifying that the required fields are present or other check as required. Accordingly, checking a first data field (required fields) within the converted service request (validate) against subsequent data fields (fields are present) within the converted service request (validate), wherein the first data field holds data corresponding to data held in at least one of the subsequent data fields (verifying that the required fields are present)

Sheard, Balasubramanian, and Tucker disclose systems that process transactions between systems. They are therefore within the same field of endeavor as applicant's invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Tucker to the disclosure above to the combination of Sheard and BalaSubramanian for the purpose of checking for completeness, and verifying that the required fields are present, 0045.

**Claim 8 :**

Sheard and Balasubramian do not explicitly disclose "wherein the open data format includes extensible markup language."

On the other hand, Tucker discloses 0044, the transformation engine may use XML and XSL and/or other methods of conversion. Accordingly, wherein the open data format includes extensible markup language (XML).

Sheard, Balasubramanian, and Tucker disclose systems that process transactions between systems. They are therefore within the same field of endeavor as applicant's invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Tucker to the disclosure above to the combination of Sheard and Balasubramanian for the purpose of sharing data in an extensible format.

**Claim 13 :**

The combination of Sheard and Balasubramanian disclose in Balasubramanian

“checking for missing data in the data fields”[0097, missing information]

“checking for incomplete data in the data fields”[0097, missing information]

Sheard and Balasubramanian do not explicitly disclose

“checking for data format errors”

On the other hand, Tucker more explicitly discloses

“checking for data format errors.” [0044 and 0045, data may be checked for completeness]

Sheard, Balasubramanian, and Tucker disclose systems that process transactions between systems. They are therefore within the same field of endeavor as applicant’s invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Tucker to the disclosure above to the combination of Sheard and BalaSubramanian for the purpose of checking for completeness, and verifying that the required fields are present, 0045.

**Claim 14 :**

Sheard and Balasubramanian do not explicitly disclose “checking a first data field within the converted service request against subsequent data fields within the converted service request,



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wherein the first data field holds data corresponding to data held in at least one of the subsequent data fields.”

On the other hand, Tucker discloses 0045, discloses checks for completeness may include verifying that the required fields are present or other check as required. Accordingly, checking a first data field (required fields) within the converted service request (validate) against subsequent data fields (fields are present) within the converted service request (validate), wherein the first data field holds data corresponding to data held in at least one of the subsequent data fields (verifying that the required fields are present)

Sheard, Balasubramanian, and Tucker disclose systems that process transactions between systems. They are therefore within the same field of endeavor as applicant’s invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Tucker to the disclosure above to the combination of Sheard and BalaSubramanian for the purpose of checking for completeness, and verifying that the required fields are present, 0045.

**Claim 18 :**

Sheard and Balasubramian do not explicitly disclose “wherein the open data format includes extensible markup language.”

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On the other hand, Tucker discloses 0044, the transformation engine may use XML and XSL and/or other methods of conversion. Accordingly, wherein the open data format includes extensible markup language (XML).

Sheard, Balasubramanian, and Tucker disclose systems that process transactions between systems. They are therefore within the same field of endeavor as applicant's invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Tucker to the disclosure above to the combination of Sheard and Balasubramanian for the purpose of sharing data in an extensible format.

**11. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6208345 by Sheard et. al. (hereafter Sheard) and U.S. Patent Application Publication 20030046289 by Balasubramanian et. al. (hereafter Balasubramanian) further in view of U.S. Patent 6937993 by Gabbita et. al. (hereafter Gabbita).**

**Claim 9 :**

Sheard and Balasubramanian do not explicitly disclose

“querying a service scheduling resource to identify an available service date for performing a service requested in the validated service requested; and”

“including a selected service date in the service order.”

On the other hand, Gabbita discloses col. 9 lines 34-37, scheduling a service order or a supplement to a service order, involves identifying all of the activities required to complete the

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order, determining the order in which the activities should be completed, and specifying the required completion time for each activity. Col. 9 lines 45-55 customer due date specified in the order. Accordingly, querying a service scheduling resource (scheduling a service order) to identify (identifying) an available service date for performing a service requested in the validated service requested (col. 9 lines 23-25, planned start and finish times for each step using the customer delivery date.); and including a selected service date in the service order (required completion time).

Sheard, Balasubramanian, and Gabbita are all servicing systems and are therefore within the same field of endeavor and analogous. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Gabbita's disclosure above to the disclosure of Sheard and Balasubramanian for the purpose of tracking service orders.

**Claim 19 :**

Sheard and Balasubramanian do not explicitly disclose

“querying a service scheduling resource to identify an available service date for performing a service requested in the validated service requested; and”

“including a selected service date in the service order.”

On the other hand, Gabbita discloses col. 9 lines 34-37, scheduling a service order or a supplement to a service order, involves identifying all of the activities required to complete the order, determining the order in which the activities should be completed, and specifying the

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required completion time for each activity. Col. 9 lines 45-55 customer due date specified in the order. Accordingly, querying a service scheduling resource (scheduling a service order) to identify (identifying) an available service date for performing a service requested in the validated service requested (col. 9 lines 23-25, planned start and finish times for each step using the customer delivery date.); and including a selected service date in the service order (required completion time).

Sheard, Balasubramanian, and Gabbita are all servicing systems and are therefore within the same field of endeavor and analogous. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Gabbita's disclosure above to the disclosure of Sheard and Balasubramanian for the purpose of tracking service orders.

### ***Response to Arguments***

12. Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

13. The prior art made of record listed on pto-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

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14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### ***Contact Information***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PHAM whose telephone number is (571)272-3924. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. P./  
Examiner, Art Unit 2167

/John R. Cottingham/  
Supervisory Patent Examiner, Art Unit  
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